



THE MEANING OF LIFE



...Second Life, that is. Aleks Krotoski explains how user-generated content is driving the growth of the virtual world, and provides some tips on how to get involved

Inside your computer lies the gateway to a brand-new world of community and collaboration. It's a training ground for public diplomacy, a template for education and a haven for vice. To get there, all you will have to do is become a citizen of the nation of Second Life.

Second Life is the most well known of a new genre of virtual worlds. These self-contained internet environments offer their residents a 'consensual hallucination' predicted by the cyberpunk author William Gibson. While virtual worlds of the past were populated by the technoelement, wearing costumes of orcs and goblins, the new breed of social virtual worlds – such as Second Life, There and Habbo Hotel – have captured the fancies of a much wider range of computer users.

These environments exhibit the graphical qualities of games and the communication techniques of chatrooms while exploring new ways to display, consume and maintain information. The power is in the hands of the people; Second Life is a virtual world entirely created, sustained and owned by its users,

known as residents. An ethical code of respect for others is the only limitation to what is permitted and what is possible.

LIFE ON THE LINE

Developed by Linden Lab, a San Francisco-based start-up run by programming-wonderchild Philip Rosedale and his talented colleagues, Second Life was released to the public in 2003. Since then, its meteoric rise has fed thousands of headlines, both positive and negative. It has also landed Rosedale in *Time* magazine's top 100 most influential people of 2007. Roo Reynolds, so-called 'metaverse evangelist' at IBM, believes Rosedale and Second Life are part of the Web 2.0 zeitgeist.

"The rise of Web 2.0 has seen the web become not just more interactive, but more social," he explains. "Whether it's on Facebook, MySpace, Flickr, personal blogs or Second Life, I've noticed that I've developed rich relationships by investing time in getting to know my friends and colleagues wherever they hang out online."

Indeed, Linden Lab believes Second Life is the social web in 3D. Eventually, it could transpose the vast libraries of information on the internet from static, two-dimensional, impersonal websites into fully interactive graphical environments navigable by embodied personas, called avatars, wandering together through streets of data. The experience isn't too far-fetched; it feels like taking a stroll through the suburbs and high streets of any modern town, and makes the web inherently social.

AROUND THE CLOCK

Unlike some other Web 2.0 facilities, the Second Life experience doesn't disappear when residents log out. The buildings and objects created by its eight million residents persist in the virtual ether for other people to discover, interact with and manipulate. So a Second Life library doesn't shut its doors when its owner is called for real-life tea; like a website, anyone can wander among the bookshelves, sit on the sofas and chat with other visitors at any time of the day or night. They can shop in any of the thousands of Second Life boutiques to create



their virtual identities, buying clothes, shoes, hairstyles and other accoutrements with their Linden dollars, a currency that currently has a US dollar exchange rate of L\$1 to US\$0.03.

WORLD OF DIFFERENCE

With an eight million-strong circle of potential friends, the community unsurprisingly breaks up into smaller social networks based on common interests. Interaction is immediate and in real time; avatars can talk to many people in the same proximate space just as they would in a chat room. Voices travel across 25m of virtual space, but avatars can raise or lower their voices to speak to larger or more intimate audiences. Alternatively, they can make the conversations private by using the in-world messaging service.

Exploration of a specific area is generally done on foot, but it's just as easy to fly to take in the sights, and a range of vehicles from go-karts to hot air balloons are available, too. Second Life citizens can teleport directly to locations, making transit time across the 31 square miles of virtual land as quick as clicking on a hyperlink.

Although Rosedale prefers to think of Second Life as another country rather than a web application, the land laws governing most of this new terra firma are more lenient than those of their physical counterparts. Land is

Learning curve Education in Second Life

Some of the most exciting applications in Second Life have come from educators who see the environment as an ideal place to experiment with multimedia and simulation.

According to a recent report, 42 UK universities and higher institutions have islands or offices in Second Life, and they are increasingly forming collaborative education and research institutions. The National Physical Laboratory, responsible for much of the NASA presence in the virtual world, has spearheaded a project called SciLands, gathering physical science departments together for simulation research in one area of the virtual world. Future collaborations include bringing nuclear power plants into the online space.

Social scientists have been fascinated by virtual worlds for years. Several academic projects are currently under way, examining everything from the study of information diffusion through social networks to digital interpersonal body language and its effects.

Second Life has been heralded as an excellent resource for distance learning. Several universities hold regular lectures in the virtual world, incorporating the real-time chat functionality with object building and

demonstration. Dr Helen Yanacopulos, senior lecturer of international politics and development at the Open University, views the space as a unique opportunity to integrate their distance learning objectives.

"The Open University has been moving towards more online teaching, and this is increasingly the case with respect to our international students," she explains. "I see the 'physical embodiment' of students in their avatars having vast potential as it could allow my students to interact with each other synchronously in Second Life tutorials. Students from Germany, Uganda and the UK, for example, could meet, discuss and debate issues that I am teaching them through our courses, complementing all the other teaching methods we use." There are already three OU-linked islands, SchomeBase and CetlMent in the Main Grid and Schome Park in the Teen Grid.

The Teen Grid area, accessible only to children between 11 and 17 and key adults, is also home to Global Kids, an active informal learning project. This aims to "transform urban youth into successful students and global leaders" by promoting philanthropic and international self-learning.

owned by residents, who set their own rules as to which other residents are allowed on their patch, and how they can behave. Landlords can eject residents or make land inaccessible to the public, but few exercise such rights. Residents are pretty much free to wander where they like, including into other users' virtual boudoirs. This can occasionally cause an uncomfortable moment as accidental voyeurs attempt to extricate themselves from explicit situations (anything goes in Second Life), but generally most activities are above board. You're more likely to wander into the midst of a discussion on politics or philosophy than anything untoward.

WHAT CAN YOU DO?

You can do almost anything in Second Life, from the mundane to the extraordinary. Thanks to the unrestricted template, anyone can import their idea of entertainment or education to this frontier. "Virtual worlds are already being used for a wide range of activities. Marketing and brand promotion is probably still the most obvious use at the moment," explains Reynolds.

"It's not all about marketing and PR, though. We are just beginning to scratch the surface of what's possible in virtual worlds. Already, people are finding ways to use them for learning, training and rehearsals, visualisation and interaction, and even something as seemingly simple as social connectedness and playful networking," he says.

At the heart of the activities in the online world are Groups, formal social collectives which are dedicated to a range of interests from birthday parties to the American Cancer Society's annual Second Life Relay for Life charity drive. They're great starting points for finding like-minded others, as the publicly accessible Groups Search facility returns all relevant matches, and if there's not already a group dedicated to a particular interest, it's very simple to set one up.

The most successful burgeoning subcultures in the virtual world comprise content creation and performance. This is a rather broad remit; content creation can be anything from city planning to fashion design and movie making. "The explorers and innovators have already spent many months understanding virtual worlds, exploring them and discovering new ways of using them and getting to grips with what it means to inhabit and work in virtual worlds in the same way that the world just about now understands the benefits of living and doing business on the web," says Reynolds.

Real-life musicians are making a splash, too. Performers such as Slim Warrior and The Strangefates stream their offline live performances into in-world music venues, broadening their fanbases across national borders. Dance companies such as the Second Life Ballet and the ZeroG SkyDancers take choreography and movement to new heights – literally – demonstrating pirouettes and acrobatics that would turn Baryshnikov green with envy. Even theatre troupes are getting in on the act. Regular performances are listed on the Events board, available via the Search button.

Second Life has become an important setting for lectures and appearances by politicians, campaigners, authors and other public figures. US Senator John Edwards chose to announce his intention to run for president in the virtual world, and William Gibson, the author who invented the word 'cyberspace', made his first foray in September 2006. Universities are particularly adept at making the most of the space (see 'Learning curve', above), and *Nature* magazine's island provides simulations for the general public to explore.

If the highbrow isn't your thing, there's a range of clubs and gaming facilities for those who wish to follow more social pursuits. Most of these are aimed at new residents, who need some virtual cash to get started.



The bulk of activities advertised read as though they were written by over-excited teenage marketing executives. “!!!!FREE LINDENS!!!!” they scream, waving their assets high while trying to draw the crowds of cash-poor consumers into their shopping paradises. For at the heart of this virtual world are the underlying tenets of capitalist trade. Thanks to recent real-world headlines of Second Life’s buoyant economy, almost everyone who lands on its shores wants to make a quick buck.

Only subscription-paying account holders receive an allowance from Linden Lab as a reward for their dedication to the service, so the majority of gold-rushers who arrived in the last quarter of 2006 chose to join for free, clutching their New Resident windfalls of 200 Linden Dollars.

CASHING IN

While you’d probably be surprised how far the equivalent of US\$1 will go, it doesn’t stretch to big purchases such as rent or land ownership, which are prerequisites for setting up shop. You can buy Linden Dollars with a credit card from www.secondlife.com, but to make a real splash in the online environment, like US dollar millionaire land baron Anshe Chung, you’ve got to get a job.

There are plenty of options, from retail to entertainment to building. The latter is the most lucrative and offers the greatest skill development opportunity in the virtual world; budding Norman Fosters are responsible for the look and feel of Second Life, contributing to its

landscape using the simple 3D modelling tools provided with the platform.

LAWS OF THE LAND

The general liberalism that pervades most of the online interactions in Second Life is down to the people who populate it. As with most new technologies, the first citizens of this digital frontier were predominantly libertarians wishing to put into practice their political ideals. They established a very open society, yet over the years certain social boundaries have arisen.

Some rules – both socially and Linden-sanctioned – do apply, and the behavioural guidelines displayed during registration are worth reading. A left-leaning ideological sentiment prevails, and in January 2007, when the right-wing French political organisation Front Nationale set up shop in Second Life, they were greeted with a barrage of angry virtual protesters attempting to sabotage their efforts. No actual damage occurred, but the repeated attacks finally drove the organisation away.

The biggest bones of contention are picked when external stakeholders use the space for offline publicity without offering relevant benefits for the already-established and thriving community. “An enormous 3D billboard is a likely turnoff,” explains Reynolds, “but providing fun, interactive and playful experiences tends to work well.” Still, virtual protest is a regular occurrence at virtual versions of American Apparel, Adidas and Toyota, spearheaded by a core of old-timers keen to keep the community free from outside intrusion.

The community polices itself with rare intrusion from Linden Lab. Residents generally don’t ask about offline lives and are happy to communicate with each other based on users’ online identities. Politeness is standard; the land is split into PG and Mature areas, and adult indiscretions or language in PG regions are discouraged. People are quite willing to offer help and items to new account holders, or ‘newbies’ as they’re called, and in general a gift economy prevails for items that creators have marked as open source. Any personal attacks, either verbal or physical, are generally met with social exclusion.

Theft is extremely rare. Residents who are caught are subject to public humiliation on a public Police Blotter on the Second Life website. Word gets around, and if someone is deemed untrustworthy, people don’t do business with them. Indeed, the political nature of the system is encouraging to real-life public policy-makers, who are studying Second Life and other virtual environments for clues as to how laws in the real world are made and broken.

In general, however, what happens in Second Life stays in Second Life. Issues between residents are usually dealt with inside the virtual world with no need for top-down policing. As new worlds go, it’s not a utopia, but it is quite an exciting experiment.

BRAVE NEW WORLD

Second Life is testament to what can happen when a multimedia platform opens its content creation facilities and its ownership rights to the

New world order Getting started in Second Life

Landing in Second Life can be intimidating for new recruits, but with a little effort, you’ll have no trouble integrating with the virtual community.

First you need to ensure your hardware is up to scratch. Second Life currently supports Windows 2000 and XP but not Vista, and Mac OS X 10.3.9 or later. You’ll also need a powerful PC to make the most of it. We recommend at least a 1.5GHz processor and 1GB RAM, and a decent graphics card is essential – an nVidia GeForce 2 or ATI Radeon 8500 is the minimum requirement. The only thing installed on your PC is the Second Life client; everything else streams from the game’s servers, so a broadband connection is also essential.

Once you’re kitted out, you can dive in. The official site, www.secondlife.com,

provides everything you’ll need. As with most web applications, you’ll need to provide a few details and choose a username. Second Life is available only to people 18 years and over, so appropriate age verification such as a credit card is necessary. However, there is also a Teen Second Life, available for kids between 11 and 17. Both ‘grids’ are inaccessible from the other.

After you’ve chosen a name, you can select one of the generic avatars (you’ll be able to customise your online appearance much more using a simple system of sliders once you’ve logged on for the first time). You should then choose an account type: Basic accounts are free, while Premium accounts cost US\$72 (around £36) per year. Both types of account grant full access to the Second Life universe, but Premium account holders receive a weekly £300 (Linden Dollar) stipend and can own

virtual land. Finally, download the 32MB Second Life client.

Your first destination is Orientation Island, which introduces you to the basics of the virtual world. It’s protected land, so the only people around will be new account holders. The key points to learn are how to move around, how to teleport to different places on the map, how to look at things, how to interact with objects and how to speak with other residents. Follow the instructions, but don’t worry if you’ve not mastered everything. There’s plenty of time once you arrive at the mainland.

Remember, if you have any problems whatsoever, feel free to ask. There are official Second Life greeters at all the main points where newbies congregate, and most residents are happy to offer advice.



▲ Adjust everything from your avatar’s hairstyle to their foot size with a series of sliders

HOW TO... GET AROUND IN SECOND LIFE

Movement	Action
Move around	Use the arrow keys on the keyboard to walk forwards, backwards and turn left and right. Press E to jump.
Fly	Press the F key. To ascend, press E; to descend, press C.
Look around	Hold the Alt (or Apple) key and use the arrow keys to look up, down, left or right.
Focus on an object	Hold the Alt (or Apple) key and click the left mouse button. Press the Esc key and your avatar will be the centre of your universe again.
Interact	Right-click the mouse and select from the options that pop up.
Chat	In public: hit return and type away. To instant message: right-click on an avatar and choose ‘Send IM’.
Teleport	If you see an event you’d like to attend or a place you’d like to visit in the event or place listings (both available by clicking on the Search button at the bottom of the screen), there will be an advertised option to Teleport. Click it to be transported instantly.



general public. User-generated content is the driving force behind the Web 2.0 world, and Second Life is a prime example of that.

At the moment, the residents are being roused by the implementation of the new voice service which, in the long run, will make the application more useful for big businesses as a distributed communication facility for meetings and training purposes. The old guard see this as a breach of their anonymity; richer media such as voice services are sure to have a profound effect on many existing relationships, which have until now been based purely on text-based communication.

POWER TO THE PEOPLE

Yet the truth is that the power of virtual worlds lies in the way in which new recruits will use them. Moves from big technology companies and media organisations, from IBM and HP to Reuters and the BBC, suggest that these new landscapes are part of our digital future.

"The standards and conventions [that] underpin the web took years to mature, and have barely begun to emerge in virtual worlds yet," explains Reynolds. "Wouldn't it be exciting to be able to jump between worlds in the same way that you don't need a different web browser to view websites on different servers?"

The signs point to a new method of consumption, offering fascinating opportunities for content creation. The future of virtual worlds will demand active participation in the production of new technologies, driving how we interact with one another in years to come. **CS**

Help! Technical issues

Second Life is a demanding application, requiring a powerful PC and a fast internet connection. As the environment has grown, scaling problems have emerged, resulting in occasional performance and service glitches. Linden Lab's servers have never dropped completely – even with a growth rate of 30 per cent a month – but some residents are concerned that the company is putting new features, such as voice services, before solving the existing known technical issues.

Second Life never feels full. Each 16-metre square area of land represents a server, and the more people who land in one place, the more it drains the server's performance. Concerts, performances, public appearances, lectures and other events can only gather, at most, 65 people. There are facilities that allow organisers to circumvent the audience limitations, but these come at a cost.

Because the environment is wholly user-generated, there's no quality control or ability to optimise graphics. This gives the environment something of a clunky graphical feel. Another disruption is the fortnightly service upgrade. The world is inaccessible for six hours every two weeks as the necessary updates are implemented and the service is rehauled.

However, Second Life's popularity suggests that these technical issues are an acceptable price for the freedom that its user-generated content allows.

Activity centre 10 things to do in Second Life

GET TRAINED

The first stop for newbies is the thriving New Citizens Incorporated campus, where you can catch extremely useful training sessions for Second Life basics, from building to putting on clothes. This resident-run association has also organised self-led courses so you can learn at your own pace.



CATCH UP ON THE NEWS

When the renowned news agency Reuters announced that it was entering the virtual world, the floodgates opened and offline business poured in. Reuters remains a shining example of how to integrate real-world services with the community. Come here to read up on the latest in- and out-of-world news and teleport to topic-led discussions happening in the state-of-the-art office building.



GO TO A LIVE GIG

British musician Slim Warrior created the 'Menorca' music venue to host live performances. You'll find broadcasts of offline gigs and exclusive Second Life performances there. You can also check out the MetaJams, when artists from around the real world make music together, live, in the virtual world.



EXPLORE DEMOCRACY IN ACTION

The democratic collective of Neualtenburg, modelled on a Bavarian town, aims to explore new ways of living in this stunning simulation. It hosts regular discussions on a variety of topics centred on Second Life's Thinkers group.



DANCE, DANCE, DANCE

As with most entertainment destinations, Second Life's heart lies at the centre of its vibrant nightlife. Hundreds of clubs offer beats 24 hours a day, plus the chance to earn a little cash playing games to the music. Look out for buttons to pick up free dancing animations and hit the floor.



ATTEND A BOOK READING

The Paris-based Shakespeare and Company bookshop set up an in-world branch in late 2006, and hosts book readings and coffee mornings several times a week. The laid-back chats offer a welcome respite from some of the more peculiar goings on in Second Life.



VISIT VIRTUAL DUBLIN AND AMSTERDAM

Dublin and Amsterdam have both been beautifully re-created inside the virtual world. You can grab a pint of the dark stuff at the Blarney Stone in Dublin, and avoid seedy sights in Amsterdam's sexually explicit red-light district. The detailed re-creation of Amsterdam – houseboats, canals and all – was recently purchased for US \$50,000 on eBay.



HALLUCINATE

One of the first forays into Second Life by academia, this simulation re-creates the sights and sounds of schizophrenic hallucinations in disturbingly clear detail. Co-developed by the University of California in the US and the University of Queensland in Australia, it shows how powerful the tools in Second Life can be.



GO TO THE MALL

When in Second Life, do as Second Lifers do. And in this virtual world, they shop. It doesn't matter which mall you choose; there are outlets for everything under the digital sun, from hairstyles to hair vests, beachwear to bumper cars.



VISIT THE SOCIAL SIMULATION RESEARCH LAB

If, after getting lost in Second Life, you have the post-modern desire to understand the implications of this virtual world, the library at the SSRL offers over 150 articles about multi-user environments, available to everyone for free.

